

APPLICATION FOR BYPRODUCT MATERIAL LICENSE  
INDUSTRIAL

a. NEW LICENSE

b. AMENDMENT TO:  
LICENSE NUMBERc. RENEWAL OF:  
LICENSE NUMBER

34-16334-01/10/79

See attached instructions for details.

Completed applications are filed in duplicate with the Division of Fuel Cycle and Material Safety, Office of Nuclear Material Safety, and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555 or applications may be filed in person at the Commission's office at 1717 H Street, NW, Washington, D. C. or 7915 Eastern Avenue, Silver Spring, Maryland.

## 2. APPLICANT'S NAME (Institution, firm, person, etc.)

CLOW CORPORATION

TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION

622-6651 (614)

## 3. NAME OF PERSON TO BE CONTACTED REGARDING THIS APPLICATION

PAUL. J. BONSTEEL

TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION

622-6651 (614) 212

## 4. APPLICANT'S MAILING ADDRESS (Include Zip Code)

CLOW CORPORATION

P. O. BOX 479

COSHOCKTON, OHIO 43812

5. STREET ADDRESS WHERE LICENSED MATERIAL WILL BE USED  
(Include Zip Code)

CLOW CORPORATION

P. O. BOX 479

COSHOCKTON, OHIO 43812

(IF MORE SPACE IS NEEDED FOR ANY ITEM, USE ADDITIONAL PROPERLY KEYED PAGES.)

## 6. INDIVIDUAL(S) WHO WILL USE OR DIRECTLY SUPERVISE THE USE OF LICENSED MATERIAL

(See Items 16 and 17 for required training and experience of each individual named below)

FULL NAME

TITLE

A. C. BROWN

METALLURGIST

a. W. W. MENCER

GENERAL FOREMAN, MELTING

b. T. DEAN

GENERAL FOREMAN, 3RD SHIFT

c. J. HONABARGER

LINE FOREMAN

## 7. RADIATION PROTECTION OFFICER

Attach a resume of person's training and experience as outlined in Items 16 and 17 and describe his responsibilities under Item 15.

C. A. ROHRIG, SAFETY DIRECTOR

## 8. LICENSED MATERIAL

LINE NO.	ELEMENT AND MASS NUMBER A	CHEMICAL AND/OR PHYSICAL FORM B	NAME OF MANUFACTURER AND MODEL NUMBER (If Sealed Source) C	MAXIMUM NUMBER OF MILLICURIES AND/OR SEALED SOURCES AND MAXIMUM ACTIVITY PER SOURCE WHICH WILL BE POSSESSED AT ANY ONE TIME D
(1)	Cesium-137	Sealed Source	Texas Nuclear 570-57157C	2 - 500 Millicuries each
(2)	Strontium 90	Sealed Source	Texas Nuclear 696-69381	2 - 2 Microcuries each
(3)				
(4)				

## DESCRIBE USE OF LICENSED MATERIAL

E

(1) 1 each device used to control scrap level in North cupola

(2) 1 each device used to control scrap level in South cupola

(3) 8508020210 850628

REG3 LIC30

34-16334-01

PDR

License For Information  
NEXT PAGE  
on reverse side

## 9. STORAGE OF SEALED SOURCES

LINE NO.	CONTAINER AND/OR DEVICE IN WHICH EACH SEALED SOURCE WILL BE STORED OR USED. A.	NAME OF MANUFACTURER B.	MODEL NUMBER C.
(1)	The source holder itself is complete	Texas Nuclear	5193
(2)	Container for shipping, storage & use	Texas Nuclear	5365
(3)			
(4)			

## 10. RADIATION DETECTION INSTRUMENTS

LINE NO.	TYPE OF INSTRUMENT A	MANUFACTURER'S NAME B	MODEL NUMBER C	NUMBER AVAILABLE D	RADIATION DETECTED (alpha, beta, gamma, neutron) E	SENSITIVITY RANGE (milliroentgens/hour or counts/minute) F
(1)	N. A.					
(2)						
(3)						
(4)						

## 11. CALIBRATION OF INSTRUMENTS LISTED IN ITEM 10

<input type="checkbox"/> a. CALIBRATED BY SERVICE COMPANY NAME, ADDRESS, AND FREQUENCY  N. A.	<input type="checkbox"/> b. CALIBRATED BY APPLICANT Attach a separate sheet describing method, frequency and standards used for calibrating instruments.
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## 12. PERSONNEL MONITORING DEVICES

TYPE (Check and/or complete as appropriate.) A	SUPPLIER (Service Company) B	EXCHANGE FREQUENCY C
<input type="checkbox"/> (1) FILM BADGE  <input type="checkbox"/> (2) THERMOLUMINESCENCE DOSIMETER (TLD)  <input type="checkbox"/> (3) OTHER (Specify): N. A.		<input type="checkbox"/> MONTHLY  <input type="checkbox"/> QUARTERLY  <input type="checkbox"/> OTHER (Specify):

## 13. FACILITIES AND EQUIPMENT (Check where appropriate and attach annotated sketch(es) and description(s).)

- ☐ a. LABORATORY FACILITIES, PLANT FACILITIES, FUME HOODS (Include filtration, if any), ETC.  
☐ b. STORAGE FACILITIES, CONTAINERS, SPECIAL SHIELDING (fixed and/or temporary), ETC.  
☐ c. REMOTE HANDLING TOOLS OR EQUIPMENT, ETC.  
☐ d. RESPIRATORY PROTECTIVE EQUIPMENT, ETC. N. A.

## 14. WASTE DISPOSAL

a. NAME OF COMMERCIAL WASTE DISPOSAL SERVICE EMPLOYED

N. A.

b. IF COMMERCIAL WASTE DISPOSAL SERVICE IS NOT EMPLOYED, SUBMIT A DETAILED DESCRIPTION OF METHODS WHICH WILL BE USED FOR DISPOSING OF RADIOACTIVE WASTES AND ESTIMATES OF THE TYPE AND AMOUNT OF ACTIVITY INVOLVED. IF THE APPLICATION IS FOR SEALED SOURCES AND DEVICES AND THEY WILL BE RETURNED TO THE MANUFACTURER, SO STATE.

# INFORMATION REQUIRED FOR ITEMS 15, 16 AND 17

Describe in detail the information required for Items 15, 16 and 17. Begin each item on a separate page and key to the application as follows:

15. RADIATION PROTECTION PROGRAM. Describe the radiation protection program as appropriate for the material to be used including the duties and responsibilities of the Radiation Protection Officer, control measures, bioassay procedures (if needed), day-to-day general safety instruction to be followed, etc. If the application is for sealed source's also submit leak testing procedures, or if leak testing will be performed using a leak test kit, specify manufacturer and model number of the leak test kit.
16. FORMAL TRAINING IN RADIATION SAFETY. Attach a resume for each individual named in Items 6 and 7. Describe individual's formal training in the following areas where applicable. Include the name of person or institution providing the training, duration of training, when training was received, etc.
  - a. Principles and practices of radiation protection.
  - b. Radioactivity measurement standardization and monitoring techniques and instruments.
  - c. Mathematics and calculations basic to the use and measurement of radioactivity.
  - d. Biological effects of radiation.
17. EXPERIENCE. Attach a resume for each individual named in Items 6 and 7. Describe individual's work experience with radiation, including where experience was obtained. Work experience or on-the-job training should be commensurate with the proposed use. Include list of radioisotopes and maximum activity of each used.

Applicant	5568
Check No.	110.34
Amount/Fee	SEP 17 1979
Type of Fee	18. CERTIFICATE
Date Check	SEP 17 1979
Received By	Brown

RECEIVED BY LFMB	
Date	SEP 5 1979
Log	SEP 10 1979
By	Brown
Orig. To	
Action Compl.	9/18/79

The applicant and any official executing this certificate on behalf of the applicant named in Item 2, certify that this application is prepared in conformity with Title 10, Code of Federal Regulations, Part 30, and that all information contained herein, including any supplements attached hereto, is true and correct to the best of our knowledge and belief.

WARNING.—18 U.S.C., Section 1001; Act of June 25, 1948; 62 Stat. 749; makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

a. LICENSE FEE REQUIRED (See Section 170.31, 10 CFR 170)	b. CERTIFYING OFFICIAL (Signature) <i>Jack R. Kanuckel</i>
(1) LICENSE FEE CATEGORY: Special Nuclear Material 1 I	c. NAME (Type or print) Jack R. Kanuckel
(2) LICENSE FEE ENCLOSED: \$ 110.	d. TITLE Plant Manager
	e. DATE August 30, 1979

ck not rec'd 9/2 9/4/79

15. The radiation protection officer will advise those employees whose assignments require entry into the monitored vessels, and/or adjustment and repair of source mountings, of the possibility of radiation exposure.

The department foremen will personally check that the sealed sources are locked closed at all times except when a particular cupola (vessel) is in operation. The radiation protection officer will check at irregular intervals to assure that the sources are locked in the closed position when a vessel (cupola) is not in operation.

EXCEPTION:

When a cupola is not in operation that source may be unlocked during that period required by Maintenance personnel to check and/or adjust proper operation of the level control.

No additional personnel monitoring devices are required due to the presence of these sources. The source holders are so designed that it is unlikely that any person can receive an exposure in excess of 0.125 rem per year and the radiation levels at one foot from the nearest accessible surface are less than 5 MR/hour.

We estimate that six persons could be within three feet of any nuclear device five hours per week or less.

The source holders were tested for integrity after installation by Texas Nuclear Division Ramsey Engineering. In December 1977, and on three year intervals thereafter, a leak test is performed using Texas Nuclear labs and procedure QT-1K. Inventory and test records are maintained in Engineering File 365.J4.00.



16. Formal training was presented on August 31, 1979, by the Ramsey Engineering Company - Texas Nuclear Division, to those individuals who directly supervise the use of the licensed material and the Radiation Protection officer.

The two-hour course covered the following areas:

- (a) Principles and Practice of Radiation Protection
- (b) Radioactivity measurement, monitoring techniques, and basic calculations to measure radioactivity.  
A radiation survey was performed to illustrate this area of discussion.
- (c) Biological effects of radiation. The majority of the course dealt with this topic as it related to our radioactive material.

17. The experience of Archie Brown, Willard Mencer, Tom Dean, Jake Honabarger, and Cliff Roahrig in radiation, has come through their interaction with the Radioisotopes Cesium 137, and Strantium 90 located at the Clow Corporation in Coshocton, Ohio, for which this license shall apply.